

# Catalyst Substrates Remove Contaminants, Produce Fuel



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***Precision Combustion Inc. (PCI)  
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## **NASA Technology**

- ◆ With no fresh supply of air, there is great potential for contaminants to build up within the International Space Station (ISS)
- ◆ NASA wanted a regenerable process for ongoing removal of carbon dioxide and contaminants on long-term missions



## **Partnership**

- ◆ PCI had previously devised spinoff catalytic converters for automotive exhaust applications
- ◆ Through a Small Business Innovation and Research (SBIR) contract, PCI adapted its technology to provide a trace contaminant removal system
- ◆ PCI received the "Tibbetts Award" and "Army SBIR Achievement Award," twice each, for the technology's many applications

## **Benefits**

- ◆ PCI devices ensure clean and efficient combustions, provide emissions controls, and are also applied to chemical manufacturing
- ◆ Its Microlith reactor can convert hydrocarbon into syngas, which can operate fuel cells
- ◆ Microlith technology is being used as a fuel reformer in the Navy, Army, and Air Force